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 NEWS  2          "Ask CAS" for self-help around the clock
 NEWS  3  OCT 23  The Derwent World Patents Index suite of databases on STN
                  has been enhanced and reloaded
 NEWS  4  OCT 30  CHEMLIST enhanced with new search and display field
 NEWS  5  NOV 03  JAPIO enhanced with IPC 8 features and functionality
 NEWS  6  NOV 10  CA/CAplus F-Term thesaurus enhanced
 NEWS  7  NOV 10  STN Express with Discover! free maintenance release Version
                  8.01c now available
 NEWS  8  NOV 20  CAS Registry Number crossover limit increased to 300,000 in
                  additional databases
 NEWS  9  NOV 20  CA/CAplus to MARPAT accession number crossover limit increased
                  to 50,000
 NEWS 10  DEC 01  CAS REGISTRY updated with new ambiguity codes
 NEWS 11  DEC 11  CAS REGISTRY chemical nomenclature enhanced
 NEWS 12  DEC 14  WPIDS/WPINDEX/WPIX manual codes updated
 NEWS 13  DEC 14  GBFULL and FRFULL enhanced with IPC 8 features and
                  functionality
 NEWS 14  DEC 18  CA/CAplus pre-1967 chemical substance index entries enhanced
                  with preparation role
 NEWS 15  DEC 18  CA/CAplus patent kind codes updated
 NEWS 16  DEC 18  MARPAT to CA/CAplus accession number crossover limit increased
                  to 50,000
 NEWS 17  DEC 18  MEDLINE updated in preparation for 2007 reload
 NEWS 18  DEC 27  CA/CAplus enhanced with more pre-1907 records
 NEWS 19  JAN 08  CHEMLIST enhanced with New Zealand Inventory of Chemicals

 NEWS EXPRESS  NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

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 NEWS X25      X.25 communication option no longer available

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FILE LAST UPDATED: 8 Jan 2007  (20070108/ED)

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=> s (carcinoembryonic antigen) or CEA
          5941 CARCINOEMBRYONIC
             1 CARCINOEMBRYONICS
          5941 CARCINOEMBRYONIC
                 (CARCINOEMBRYONIC OR CARCINOEMBRYONICS)
        304268 ANTIGEN
        242594 ANTIGENS
        383787 ANTIGEN
                 (ANTIGEN OR ANTIGENS)
          5810 CARCINOEMBRYONIC ANTIGEN
                 (CARCINOEMBRYONIC(W)ANTIGEN)
          6322 CEA
           191 CEAS
          6491 CEA
                 (CEA OR CEAS)
L1        8456 (CARCINOEMBRYONIC ANTIGEN) OR CEA

=> s antibod?
L2      480519 ANTIBOD?

=> s l2 (l) l1
L3        2398 L2 (L) L1

=> s cancer? or tumor? or neoplas?
        317410 CANCER?
        454006 TUMOR?
        476337 NEOPLAS?
L4      752257 CANCER? OR TUMOR? OR NEOPLAS?

=> s l3 and l4
L5        1772 L3 AND L4

=> s fucosyl or sialy
=> s fucosyl or sialy?
          1308 FUCOSYL
          9883 SIALY?
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L6        10953 FUCOSYL OR SIALY?

=> s l6 and l5
L7           64 L6 AND L5

=> s diagnos? or detect
=> s diagnos? or detect?
         273605 DIAGNOS?
        1645948 DETECT?
L8      1834731 DIAGNOS? OR DETECT?

=> s l8 and l7
L9           47 L8 AND L7

=> s l9 not py>1998
        8390778 PY>1998
L10          13 L9 NOT PY>1998

=> d ibib 1-13

L10  ANSWER 1 OF 13  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         1998:562224  CAPLUS
DOCUMENT NUMBER:          129:314208
TITLE:                    The clinical significance of u-FCC, an antigen of
                          anti-fucosylceramide antibody found in urine, in
                          patients with gastric and colorectal carcinoma
AUTHOR(S):                Tanimizu, Takamaru; Ishihara, Hideki; Hattori,
                          Hiroshi; Hamada, Setsuo; Hirayama, Renzo
CORPORATE SOURCE:         Second Department of Surgery, Saitama Medical School,
                          Saitama, Japan
SOURCE:                   Cancer (New York) (1998), 83(4), 660-665
                          CODEN: CANCAR; ISSN: 0008-543X
PUBLISHER:                John Wiley & Sons, Inc.
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
REFERENCE COUNT:          21    THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10  ANSWER 2 OF 13  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         1998:130522  CAPLUS
DOCUMENT NUMBER:          128:203898
TITLE:                    Expression of potential target antigens for
                          immunotherapy on primary and metastatic prostate
                          cancers
AUTHOR(S):                Zhang, Shengle; Zhang, Helen S.; Reuter, Victor E.;
                          Slovin, Susan F.; Scher, Howard I.; Livingston, Philip
                          O.
CORPORATE SOURCE:         Memorial Sloan-Kettering Cancer Center, Clinical
                          Immunology Service, New York, NY, 10021, USA
SOURCE:                   Clinical Cancer Research (1998), 4(2), 295-302
                          CODEN: CCREF4; ISSN: 1078-0432
PUBLISHER:                American Association for Cancer Research
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
REFERENCE COUNT:          38    THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10  ANSWER 3 OF 13  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         1997:408821  CAPLUS
DOCUMENT NUMBER:          127:107723
TITLE:                    Influence of spatial configuration on the expression
                          of carcinoembryonic antigen and mucin antigens in
                          human bladder cancer
AUTHOR(S):                Larue, Helene; Parent-Vaugeois, Carmen; Bergeron,
                          Alain; Champetier, Serge; Fradet, Yves
```

CORPORATE SOURCE: Laboratoire d'Uro-Oncologie Experimentale, Centre de recherche de l'Hotel-Dieu de Quebec, QC, G1R 2J6, Can.
SOURCE: International Journal of Cancer (1997), 71(6), 986-992
CODEN: IJCNAW; ISSN: 0020-7136
PUBLISHER: Wiley-Liss
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:276393 CAPLUS
DOCUMENT NUMBER: 124:313829
TITLE: A novel tumor-associated antigen expressed in human uterine and ovarian carcinomas
AUTHOR(S): Sonoda, Kenzo; Nakashima, Manabu; Kaku, Tsunehisa; Kamura, Toshiharu; Nakano, Hitoo; Watanabe, Takeshi
CORPORATE SOURCE: Faculty Medicine, Kyushu University, Fukuoka, Japan
SOURCE: Cancer (New York) (1996), 77(8), 1501-9
CODEN: CANCAR; ISSN: 0008-543X
PUBLISHER: Wiley-Liss
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:505380 CAPLUS
DOCUMENT NUMBER: 121:105380
TITLE: Membrane glycoproteins and oncogenes as markers in breast cancer
AUTHOR(S): Ohuchi, Noriaki; Taeda, Yoshinori; Yaegashi, Sadanori; Harada, Yuko; Kanda, Teru; Mori, Shozo
CORPORATE SOURCE: Department Surgery, Tohoku University School Medicine, Sendai, 980, Japan
SOURCE: Cancer Molecular Biology (1994), 1(3), 179-92
CODEN: ICMBEZ; ISSN: 1110-5313
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

L10 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:454876 CAPLUS
DOCUMENT NUMBER: 121:54876
TITLE: Biosynthesis and regulation of Lex and SA-Lex glycolipids in metastatic human colon carcinoma cells
AUTHOR(S): Basu, Manju; Basu, Shib Shankar; Li, Zhixiong; Tang, Hongyu; Basu, Subhash
CORPORATE SOURCE: Dep. Chem. Biochem., Univ. Notre Dame, Notre Dame, IN, 46556, USA
SOURCE: Indian Journal of Biochemistry & Biophysics (1993), 30(6), 324-32
CODEN: IJBBBQ; ISSN: 0301-1208
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:646992 CAPLUS
DOCUMENT NUMBER: 119:246992
TITLE: Clinical significance of serum sialylated LeX in breast cancer
AUTHOR(S): Yoshino, Hiroyuki
CORPORATE SOURCE: Dep. Surg. II, Tokyo Women's Med. Coll., Tokyo, 162, Japan
SOURCE: Tokyo Joshi Ika Daigaku Zasshi (1993), 63(9), 1008-24
CODEN: TJIZAF; ISSN: 0040-9022
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

L10 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:103484 CAPLUS
DOCUMENT NUMBER: 116:103484
TITLE: Mucin production by colon cancer cells cultured in serum-free medium
AUTHOR(S): Real, Francisco X.; Egea, Gustavo; Franci, Clara; Schussler, Martina H.; Xu, Mai; Welt, Sydney
CORPORATE SOURCE: Dep. Immunol., Inst. Munic. Invest. Med., Barcelona, 08003, Spain
SOURCE: International Journal of Cancer (1991), 49(5), 787-95
CODEN: IJCNAW; ISSN: 0020-7136
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:551639 CAPLUS
DOCUMENT NUMBER: 111:151639
TITLE: Production and clinical application of monoclonal antibodies NCC-CO-450, -473 reactive with high-molecular-weight glycoprotein circulating in body fluid of gastrointestinal cancer patients
AUTHOR(S): Sakurai, Yoichi
CORPORATE SOURCE: Sch. Med., Keio Univ., Tokyo, Japan
SOURCE: Keio Igaku (1989), 66(3), 565-83
CODEN: KEIGAS; ISSN: 0368-5179
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

L10 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:405451 CAPLUS
DOCUMENT NUMBER: 111:5451
TITLE: Tumor antigens determining metastasis
AUTHOR(S): Matsushita, Yoshifumi; Irimura, Tatsuro
CORPORATE SOURCE: MD Anderson Hosp. Tumor Inst., Univ. Texas, Houston, TX, 97030, USA
SOURCE: Jikken Igaku (1989), 7(5), 571-8
CODEN: JIIGEF; ISSN: 0288-5514
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Japanese

L10 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:191084 CAPLUS
DOCUMENT NUMBER: 110:191084
TITLE: Anti-human digestive system cancer monoclonal antibody and its preparation and use in digestive system cancer diagnosis
INVENTOR(S): Yoshida, Hajime; Hanai, Nobuo; Furuya, Akiko
PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 25 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 253646	A2	19880120	EP 1987-306257	19870715
EP 253646	A3	19900131		
EP 253646	B1	19930512		
R: DE, FR, GB				
JP 63021562	A	19880129	JP 1986-166138	19860715
JP 06073470	B	19940921		
CA 1320460	C	19930720	CA 1987-542064	19870714

US 5051355	A	19910924	US 1989-445160	19891206
PRIORITY APPLN. INFO.:			JP 1986-166138	A 19860715
			US 1987-70071	B1 19870706

L10 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1988:490863 CAPLUS
DOCUMENT NUMBER: 109:90863
TITLE: Selection of a monoclonal antibody reactive with a high-molecular-weight glycoprotein circulating in the body fluid of gastrointestinal cancer patients
AUTHOR(S): Sakurai, Yoichi; Hirohashi, Setsuo; Shimosato, Yukio; Kodaira, Susumu; Abe, Osahiko
CORPORATE SOURCE: Res. Inst., Natl. Cancer Cent., Tokyo, 104, Japan
SOURCE: Cancer Research (1988), 48(14), 4053-8
CODEN: CNREA8; ISSN: 0008-5472
DOCUMENT TYPE: Journal
LANGUAGE: English

L10 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1987:154401 CAPLUS
DOCUMENT NUMBER: 106:154401
TITLE: Distribution of lung adenocarcinoma-associated antigens in human tissues and sera defined by monoclonal antibodies KM-52 and KM-93
AUTHOR(S): Shitara, Kenya; Hanai, Nobuo; Yoshida, Hajime
CORPORATE SOURCE: Tokyo Res. Lab., Kyowa Hakko Kogyo Co., Ltd., Machida, 194, Japan
SOURCE: Cancer Research (1987), 47(5), 1267-72
CODEN: CNREA8; ISSN: 0008-5472
DOCUMENT TYPE: Journal
LANGUAGE: English

=> d ibib abs 1

L10 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:562224 CAPLUS
DOCUMENT NUMBER: 129:314208
TITLE: The clinical significance of u-FCC, an antigen of anti-fucosylceramide antibody found in urine, in patients with gastric and colorectal carcinoma
AUTHOR(S): Tanimizu, Takamaru; Ishihara, Hideki; Hattori, Hiroshi; Hamada, Setsuo; Hirayama, Renzo
CORPORATE SOURCE: Second Department of Surgery, Saitama Medical School, Saitama, Japan
SOURCE: Cancer (New York) (1998), 83(4), 660-665
CODEN: CANCAR; ISSN: 0008-543X
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB It has already been shown that the production of fucosylceramide, an aberrant glycolipid, is associated with neoplastic changes in human tissues. The authors of this study designed a sandwich RIA using a mouse monoclonal anti-fucosylceramide antibody, PC47H, designated as PC/PC RIA, and measured the level of u-FCC, an antigen of PC47H, in the urine of cancer patients. The cohort comprised 41 patients with gastric carcinoma, 35 with colorectal carcinoma, 34 with other malignancies, 14 with cholelithiasis, 18 with gastric ulcer, and 110 healthy individuals. The u-FCC was quantified by PC/PC RIA. The cutoff value of u-FCC was obtained from the 110 healthy individuals, and the rates of positivity for gastric and colorectal carcinoma patients were evaluated. The rates of u-FCC positivity were 63% for patients with gastric carcinoma and 69% for colorectal carcinoma patients. The rate was only 1% (1/110) for the healthy individuals. The u-FCC value did not correlate with the values of

either CA 19-9 or carcinoembryonic antigen (CEA). In a combination assay of u-FCC with CA 19-9 and CEA, the positivity rates were 84% for gastric carcinoma patients and 85% for colorectal carcinoma patients. Gastric and colorectal carcinoma patients have significantly high levels of u-FCC in their urine compared with normal individuals.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs 11

L10 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:191084 CAPLUS
DOCUMENT NUMBER: 110:191084
TITLE: Anti-human digestive system cancer monoclonal antibody and its preparation and use in digestive system cancer diagnosis
INVENTOR(S): Yoshida, Hajime; Hanai, Nobuo; Furuya, Akiko
PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 25 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 253646	A2	19880120	EP 1987-306257	19870715
EP 253646	A3	19900131		
EP 253646	B1	19930512		
R: DE, FR, GB				
JP 63021562	A	19880129	JP 1986-166138	19860715
JP 06073470	B	19940921		
CA 1320460	C	19930720	CA 1987-542064	19870714
US 5051355	A	19910924	US 1989-445160	19891206
PRIORITY APPLN. INFO.:			JP 1986-166138 A	19860715
			US 1987-70071 B1	19870706

AB The title monoclonal antibody is prepared by the hybridoma method. It is reactive with digestive system cancer but nonreactive with normal stomach tissue and recognizes sialylated glycoproteins or glycolipids. The monoclonal antibody is useful in diagnosing human digestive system cancer, particularly pancreatic cancer. Newborn C57BL/6 mice were pretreated i.v. with normal human stomach tissue membrane prepns. before immunization with human gastric cancer membrane prepns. Immunized spleen cells were fused with myeloma P3-U1, and the hybrid cells were cloned and selected for production of the desired antibody. Antibody AMC-462 recognizes a different antigen from that recognized by antibodies to carcinoembryonic antigen or NS19-9.

=> d ibib abs 1-13

L10 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:562224 CAPLUS
DOCUMENT NUMBER: 129:314208
TITLE: The clinical significance of u-FCC, an antigen of anti-fucosylceramide antibody found in urine, in patients with gastric and colorectal carcinoma
AUTHOR(S): Tanimizu, Takamaru; Ishihara, Hideki; Hattori, Hiroshi; Hamada, Setsuo; Hirayama, Renzo
CORPORATE SOURCE: Second Department of Surgery, Saitama Medical School,

Saitama, Japan
SOURCE: Cancer (New York) (1998), 83(4), 660-665
CODEN: CANCAR; ISSN: 0008-543X
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB It has already been shown that the production of fucosylceramide, an aberrant glycolipid, is associated with neoplastic changes in human tissues. The authors of this study designed a sandwich RIA using a mouse monoclonal anti-fucosylceramide antibody, PC47H, designated as PC/PC RIA, and measured the level of u-FCC, an antigen of PC47H, in the urine of cancer patients. The cohort comprised 41 patients with gastric carcinoma, 35 with colorectal carcinoma, 34 with other malignancies, 14 with cholelithiasis, 18 with gastric ulcer, and 110 healthy individuals. The u-FCC was quantified by PC/PC RIA. The cutoff value of u-FCC was obtained from the 110 healthy individuals, and the rates of positivity for gastric and colorectal carcinoma patients were evaluated. The rates of u-FCC positivity were 63% for patients with gastric carcinoma and 69% for colorectal carcinoma patients. The rate was only 1% (1/110) for the healthy individuals. The u-FCC value did not correlate with the values of either CA 19-9 or carcinoembryonic antigen (CEA). In a combination assay of u-FCC with CA 19-9 and CEA, the positivity rates were 84% for gastric carcinoma patients and 85% for colorectal carcinoma patients. Gastric and colorectal carcinoma patients have significantly high levels of u-FCC in their urine compared with normal individuals.
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:130522 CAPLUS
DOCUMENT NUMBER: 128:203898
TITLE: Expression of potential target antigens for immunotherapy on primary and metastatic prostate cancers
AUTHOR(S): Zhang, Shengle; Zhang, Helen S.; Reuter, Victor E.; Slovin, Susan F.; Scher, Howard I.; Livingston, Philip O.
CORPORATE SOURCE: Memorial Sloan-Kettering Cancer Center, Clinical Immunology Service, New York, NY, 10021, USA
SOURCE: Clinical Cancer Research (1998), 4(2), 295-302
CODEN: CCREF4; ISSN: 1078-0432
PUBLISHER: American Association for Cancer Research
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Defining the expression of tumor-associated antigens on primary and metastatic prostate cancer is the crucial first step in selecting appropriate targets for immune attack. In this study, the distribution of the tumor-associated antigens GM2, Tn, sTn, Thompson-Friedenreich antigen (TF), Globo H, Ley, MUC1, MUC2, MUC3, MUC4, MUC5AC, MUC5B, MUC7, carcinoembryonic antigen, β chain of human chorionic gonadotropin (hCGβ), HER2/neu, PSMA, and KSA on primary and metastatic prostate cancer and 16 types of normal tissues was compared by immunohistochem., using a panel of well-characterized monoclonal antibodies. Our results show that GM2, KSA, and MUC2 were strongly expressed on 8 or 9 of 9 metastatic prostate cancer biopsy specimens and, with PSMA, hCGβ, TF, Tn, and sTn, on 8 or more of 11 primary prostate cancer specimens. Tn, MUC1, and PSMA were expressed on 4-6 of 9 metastatic specimens. The remaining antigens were expressed on no more than three of nine metastatic specimens. Normal tissues were also tested with all antibodies. With regard to the eight antigens most widely expressed on prostate cancers, PSMA was not expressed significantly on any of the normal tissues except prostate epithelium. Tn, sTn, hCGβ, and MUC2 were detected on up to 3 of 10

types of normal epithelia. GM2, TF, MUC1, and KSA were more broadly distributed on normal epithelia, all primarily at the secretory borders. STn, KSA, and hCGβ were also detected in the testis, and GM2 was expressed on gray matter of brain. From the 30 antigens that we have screened, this study provides the basis for selecting GM2, TF, Tn, sTn, hCGβ, MUC1, MUC2, KSA, and PSMA as target antigens for specific immunotherapy of prostate cancer.

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:408821 CAPLUS
DOCUMENT NUMBER: 127:107723
TITLE: Influence of spatial configuration on the expression of carcinoembryonic antigen and mucin antigens in human bladder cancer
AUTHOR(S): Larue, Helene; Parent-Vaugeois, Carmen; Bergeron, Alain; Champetier, Serge; Fradet, Yves
CORPORATE SOURCE: Laboratoire d'Uro-Oncologie Experimentale, Centre de recherche de l'Hotel-Dieu de Quebec, QC, G1R 2J6, Can.
SOURCE: International Journal of Cancer (1997), 71(6), 986-992
CODEN: IJCNAW; ISSN: 0020-7136
PUBLISHER: Wiley-Liss
DOCUMENT TYPE: Journal
LANGUAGE: English

AB CEA and cellular mucin antigens have been recognized as potential targets for specific immunotherapy and are frequently expressed in bladder cancer. We studied the coordinated expression of a bladder cancer-associated CEA glycoform and of the mucins MUC1, MUC2 and MAUB under various growth conditions in the MGH-U3 bladder-cancer cell line. CEA and MUC2 mRNAs and proteins were detected in nude mouse tumors and spheroids but not in monolayer cultures. Expression of MAUB and bladder-cancer CEA also was induced according to spatial configuration of cells. MUC1 was always expressed under various growth conditions, but its glycosylation was modulated: in spheroids and mostly in tumor cells, the SM3 protein epitope was unmasked and sialyl-Tn was induced. The kinetics of modulation of MAUB and bladder-cancer CEA were different. The epitope recognized by the monoclonal antibody (MAb) 19A211 was rapidly induced in the aggregation phase of spheroid formation and rapidly lost upon plating of tumor cells, suggesting a relationship with cell contact. By contrast, MAUB induction in spheroids was delayed to the compaction phase, when cell aggregates become resistant to disruption, and loss of expression upon tumor plating occurred slowly over several culture passages. No induction of these 2 antigens was observed in the presence of differentiation agents, endothelial cell products or interferon-γ, but it occurred when MGH-U3 cells were cultured at high d. on extracellular matrix. Our results suggest that CEA and mucin antigen expression in bladder cancer is modulated by the spatial configuration of cells.

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:276393 CAPLUS
DOCUMENT NUMBER: 124:313829
TITLE: A novel tumor-associated antigen expressed in human uterine and ovarian carcinomas
AUTHOR(S): Sonoda, Kenzo; Nakashima, Manabu; Kaku, Tsunehisa; Kamura, Toshiharu; Nakano, Hitoo; Watanabe, Takeshi
CORPORATE SOURCE: Faculty Medicine, Kyushu University, Fukuoka, Japan
SOURCE: Cancer (New York) (1996), 77(8), 1501-9
CODEN: CANCAR; ISSN: 0008-543X
PUBLISHER: Wiley-Liss
DOCUMENT TYPE: Journal

LANGUAGE: English

AB A large number of monoclonal antibodies (MoAbs) against human tumor cells have been generated and it has been shown that these MoAbs are useful tools in the diagnosis and treatment of cancer patients, as well as in the basic investigation of the oncogenesis and characterization of cancer cells. The 22-1-1 MoAb was established by cell fusion between mouse myeloma cells and spleen cells derived from mice immunized with the human uterine cervical adenocarcinoma cell line, SiSo. The tissue distribution and biol. characteristics of the 22-1-1 antigen (Ag) were examined The 22-1-1 Ag was distinct from the known tumor-associated antigens such as YH 206, GA 733, CA 125, carcinoembryonic antigen, and sialyl Lex mols. in an expression pattern in human tumor cell lines. An immunohistochem. study revealed that 22-1-1 Ag was expressed in 87.5% of uterine cervical adenocarcinomas, 66% of uterine endometrial adenocarcinomas, and 58.8% of ovarian carcinomas. Moreover, 22-1-1 Ag was detected in 87.7% of uterine cervical squamous cell carcinomas; however, it was not detected in normal uterine cervical or ovarian tissues, except in uterine endometrial glands, in which its expression was observed at low levels. The 22-1-1 Ag was secreted into cell culture supernatant fluids and was also detected in the vaginal discharges of uterine cervical carcinoma patients. The antigenic epitope of 22-1-1 Ag was shown to be a protein with a mol. weight of 78 kDa using SDS-PAGE anal. The 22-1-1 MoAb reactive to a novel tumor-associated antigen was generated. This Ag was expressed in cancer cells derived mainly from the uterus and ovary. Moreover, 22-1-1 Ag was secreted in the vaginal discharges of uterine cervical carcinoma patients. The 22-1-1 MoAb is a potential tool for the study of oncogenesis and the management of cancer patients.

L10 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1994:505380 CAPLUS

DOCUMENT NUMBER: 121:105380

TITLE: Membrane glycoproteins and oncogenes as markers in breast cancer

AUTHOR(S): Ohuchi, Noriaki; Taeda, Yoshinori; Yaegashi, Sadanori; Harada, Yuko; Kanda, Teru; Mori, Shozo

CORPORATE SOURCE: Department Surgery, Tohoku University School Medicine, Sendai, 980, Japan

SOURCE: Cancer Molecular Biology (1994), 1(3), 179-92
CODEN: ICMBEZ; ISSN: 1110-5313

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review and discussion with 104 refs. on cell surface antigens recognized by monoclonal antibodies (MAbs) and altered glycosylation of membrane glycoproteins associated with breast cancer. MUCI, TAG-72 and CEA have been recognized as breast cancer-associated antigens and the clin. application of MAbs recognizing the distinctive antigens are utilized in the management of breast cancer patients. A new tumor-associated antigen, designated AM antigen defined by MAb AM-1, was characterized. AM-1, generated against HMA-1 human breast cancer cell line, showed a preferential reactivity to breast cancer cells vs. to normal or benign epithelial cells. AM-1 recognized high mol. weight components of 160-210 kDa and > 370 kDa. Enzyme digestion of precipitated antigens demonstrated that AM antigen contains O-linked and N-linked carbohydrates with neuraminic acid structures. Binding inhibition and sandwich ELISA assays using MAbs reactive with known breast cancer-associated antigens and synthetic MUC1 core peptide demonstrated that AM antigen is distinct from CEA, TAG-72 or MUC1 antigens, while it conjoins with MUC1 and TAG-72 as a trimer form, suggesting that MAb AM-1 recognizes a novel glycoprotein which may be utilized in the management of breast cancer. The β1-6 branched oligosaccharide is expressed in human colon, breast and esophageal cancers. Two L-PHA-reactive sialylated glycoproteins, 170 and 120 kDa, have been detected in breast

cancer tissue. The former is major glycoprotein bearing β1-6 branched oligosaccharides of breast cancer and was identical to CEA. The latter 120 kDa glycoprotein belongs to LAP-1, and is highly expressed against type I collagen in vitro. Tumor suppressor gene p53, which has been shown to be altered in breast carcinoma cells, binds to specific DNA sequences and activates transcription from various promoters, and is considered to possess characteristics of a transcription factor. The authors have recently found that wild-type p53 stimulates transcription as well as DNA replication. The mutant p53, however, shows no stimulation of DNA replication. Deletion of N-terminal acidic transactivation domain impairs the function to stimulate DNA replication, suggesting that N-terminal and C-terminal regions contribute to p53-mediated stimulation of DNA replication.

L10 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:454876 CAPLUS
DOCUMENT NUMBER: 121:54876
TITLE: Biosynthesis and regulation of Lex and SA-Lex glycolipids in metastatic human colon carcinoma cells
AUTHOR(S): Basu, Manju; Basu, Shib Shankar; Li, Zhixiong; Tang, Hongyu; Basu, Subhash
CORPORATE SOURCE: Dep. Chem. Biochem., Univ. Notre Dame, Notre Dame, IN, 46556, USA
SOURCE: Indian Journal of Biochemistry & Biophysics (1993), 30(6), 324-32
CODEN: IJBBBQ; ISSN: 0301-1208
DOCUMENT TYPE: Journal
LANGUAGE: English
AB This report concerns the stepwise biosynthesis in vitro of Sialyl Lewis X, (SA-Lex), a carcinoembryonic antigen, in human colon carcinoma KM12 cells exhibiting different metastatic behaviors. The significance of SA-Lex has become even more apparent since the detection of its terminal epitope NeuAc(α2-3)Galβ1-4(Fucα1-3)GlcNAc-, as the binding ligand of the selectin family member ELAM-1. The activity level of galactosyltransferase GalT-4 which catalyzes the formation of core nLcOse4Cer (Galβ1-4GlcNAcβ1-3Galβ1-4Glc-Cer) is very high in all the metastatic lines tested with highly metastatic lines (KM12-SM) exhibiting the highest activity. The same activity pattern for galactosyltransferase is also observed when tested with iLcOse5Cer (GlcNAcβ1-3nLcOse4Cer), the precursor for polylactosamine glycolipid. Sialyltransferase SAT-3 which catalyzes the formation of LM1 (NeuAcα2-3nLcOse4Cer), the precursor for SA-Lex, is also present in all the metastatic cell lines although the activity levels are much lower compared to galactosyltransferase. The fucosyltransferase FucT-3, which catalyzes the formation of R'-Gal-Fuc(α1-3)GlcNAc-R linkage, is active with both nonsialylated substrate, nLcOse4Cer, and sialylated substrate, LM1 (NeuAcα2-3nLcOse4Cer) with the formation of either Lex (Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4Glc-Cer) or SA-Lex (NeuAcα2-3nLcOse4Cer). However, the sialylated substrate LM1 is preferred to enzymic activity since it exhibited lower Km (46 μM) than that of nLcOse4Cer (67 μM). The authors have previously characterized the same (α1-3) fucosyltransferase, FucT-3, which catalyzes the biosynthesis of both SA-Lex and SA-diLex in Colo-205 cells as well as in embryonic chicken brains. The membrane-bound enzyme activities (mentioned above) have been solubilized with non-ionic detergent Triton X-100 from these cell lines. The modulatory effect of sphingosine, a second messenger for the signal transduction pathway, has been studied with solubilized enzyme after removal of detergent. The radioactive products from above-mentioned enzymic reactions have been characterized by ELISA using specific monoclonal antibodies. The main objective of this present report is to correlate the tumorigenic glycolipid SA-Lex expression with metastasis.

L10 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:646992 CAPLUS
DOCUMENT NUMBER: 119:246992
TITLE: Clinical significance of serum sialylated LeX in breast cancer
AUTHOR(S): Yoshino, Hiroyuki
CORPORATE SOURCE: Dep. Surg. II, Tokyo Women's Med. Coll., Tokyo, 162, Japan
SOURCE: Tokyo Joshi Ika Daigaku Zasshi (1993), 63(9), 1008-24
CODEN: TJIZAF; ISSN: 0040-9022
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Sialylated Lex (S-Lex) is a tumor-associated antigen that is detected by the monoclonal antibody CSLEX-1. This study assayed serum S-Lex in breast cancer patients and investigated its usefulness and clin. significance as a tumor marker in breast cancer. S-Lex assays were performed by sandwich assay, and the pos. rate was analyzed in 227 cases of primary breast cancer, 47 cases of recurrent breast cancer, 225 healthy women, 59 cases of non-recurrent breast cancer, 115 cases of benign mammary gland disease, 64 cases of gastrointestinal disease, and 159 other organ cancer patients treated at the authors' department and related hospitals. As a cut-off value, 8.0 U/mL or greater was regarded as pos., based on S-Lex values in healthy women. The pos. rate in benign mammary gland disease and benign gastrointestinal disease was virtually identical to that in the healthy women. The degree of specificity using benign mammary gland disease and non-recurrent breast cancer as controls was 95.4%, and it was specific to breast cancer. The pos. rate in primary breast cancer was 18.9%, exhibiting higher values than CA15-3 and CEA. Correlation with stage, tumor diameter, lymph node metastasis, and remote metastasis were observed for the mean value and pos. rate in primary breast cancer. The pos. rate in recurrent breast cancer was 63.0%, and compared with non-recurrent breast cancer, and even CA15-3 and CEA, it exhibited higher values. In addition, in a combination assay of three tumor markers, the pos. rate was 89.4%. From these results, the author concludes that S-Lex has clin. significance as a tumor marker in breast cancer.

L10 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:103484 CAPLUS
DOCUMENT NUMBER: 116:103484
TITLE: Mucin production by colon cancer cells cultured in serum-free medium
AUTHOR(S): Real, Francisco X.; Egea, Gustavo; Franci, Clara; Schussler, Martina H.; Xu, Mai; Welt, Sydney
CORPORATE SOURCE: Dep. Immunol., Inst. Munic. Invest. Med., Barcelona, 08003, Spain
SOURCE: International Journal of Cancer (1991), 49(5), 787-95
CODEN: IJCNAW; ISSN: 0020-7136
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Although many colon cancer cell lines are available for study, few of them exhibit differentiated properties. When cultured in medium containing fetal bovine serum, WiDr cells (WiDr-FBS) show an undifferentiated phenotype: growth as a multilayer of cells adherent to plastic and lack of polarization, brush border, and mucin vacuoles. In contrast, WiDr cells cultured in a chemical defined serum-free medium containing insulin, transferrin and selenium (WiDr-ITS) grow as clusters of non-adherent cells with abundant desmosomes and tight junctions, microvilli and electron-lucid vacuoles. Like WiDr-FBS cells, WiDr-ITS are not polarized. WiDr-ITS cells show a marked enhancement in mucin synthesis as demonstrated by: periodic acid-Schiff and Alcian blue stains, electron microscopy,

immunohistochem. using monoclonal antibodies (MAbs) reactive with mucin-associated epitopes, immune electron microscopy and immunochem. anal. using Western blots. In comparison with WiDr-FBS cells, WiDr-ITS cells showed strong expression of Tn, sialyl-Tn, blood group A and carcinoembryonic antigen. When mouse MAbs were used, higher levels of the MUCI gene product were detected in WiDr-ITS than in WiDr-FBS cells. The full spectrum of phenotypic changes was observed after 1 mo of culture in ITS medium, and transfer of WiDr-ITS cells to FBS medium was accompanied by a partial phenotypic reversal, suggesting that these phenotypic changes result from an adaptive-rather than selective-process.

L10 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:551639 CAPLUS
DOCUMENT NUMBER: 111:151639
TITLE: Production and clinical application of monoclonal antibodies NCC-CO-450, -473 reactive with high-molecular-weight glycoprotein circulating in body fluid of gastrointestinal cancer patients
AUTHOR(S): Sakurai, Yoichi
CORPORATE SOURCE: Sch. Med., Keio Univ., Tokyo, Japan
SOURCE: Keio Igaku (1989), 66(3), 565-83
CODEN: KEIGAS; ISSN: 0368-5179
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB The monoclonal antibodies NCC-CO-450 and -473 were selected by screening with high-mol.-weight antigens (mol. weight >106) isolated from ascitic fluid of a colon cancer patient. These monoclonal antibodies detected heterogeneous but predominantly high-mol.-weight antigens in either gastrointestinal cancer tissues or body fluid samples from gastrointestinal cancer patients by immunoblotting anal. Antigens recognized by these monoclonal antibodies were characterized as a mucin-like glycoprotein in carcinoma of the colon, stomach, and pancreas. The immunohistochem. reactivities of NCC-CO-450 and -473 were distinct from those of other monoclonal antibodies used for serol. diagnosis. The antigen and epitope recognized by NCC-CO-450 was further characterized. The epitope recognized by NCC-CO-450 is considered to be an O-linked carbohydrate chain, i.e., Lea, Lex, Ley, Tn, sialyl-Lea, and sialyl sugar chain defined by NCC-ST-439 in a competitive binding inhibition assay. A sandwich RIA was developed in order to examine the serum level of NCC-CO-450 antigen. While 97% of sera had a neg. antigen value in normal donors, 56% of patients with colorectal carcinoma and 40% of patients with stomach carcinoma showed a pos. antigen value. The distribution of the antigen in sera of patients with various cancers did not show any correlation with the distribution of carcinoembryonic antigen or CA 19-9. This newly defined antigen is a good example of a normal antigen shed from cancer cells that can be possibly used as a serum tumor marker.

L10 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:405451 CAPLUS
DOCUMENT NUMBER: 111:5451
TITLE: Tumor antigens determining metastasis
AUTHOR(S): Matsushita, Yoshifumi; Irimura, Tatsuro
CORPORATE SOURCE: MD Anderson Hosp. Tumor Inst., Univ. Texas, Houston, TX, 97030, USA
SOURCE: Jikken Igaku (1989), 7(5), 571-8
CODEN: JIIGEF; ISSN: 0288-5514
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Japanese
AB A review with 52 refs. H-2 expression and expression of some tumor antigens reduce metastatic activity by elevated immune sensitivity. The levels of some tumor markers such as carcinoembryonic antigen (CEA) reflect

metastatic activity. Levels of sialyl dimeric Lex antigen detected by FH16 monoclonal antibody are higher in tumor cells than in normal mucosal membrane, lower in tumors of Duke's stage 1 than those in the other stages, and higher in metastasis of human colon tumors than primary tumors. However, low metastatic cell lines of human colon cancer HT29 synthesize more antigen reacting with FH16 than high metastatic variant assayed in nude mice. Expression of FH16 reacting antigen is suppressed in the nude mice.

L10 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:191084 CAPLUS
DOCUMENT NUMBER: 110:191084
TITLE: Anti-human digestive system cancer monoclonal antibody and its preparation and use in digestive system cancer diagnosis
INVENTOR(S): Yoshida, Hajime; Hanai, Nobuo; Furuya, Akiko
PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 25 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 253646	A2	19880120	EP 1987-306257	19870715
EP 253646	A3	19900131		
EP 253646	B1	19930512		
R: DE, FR, GB				
JP 63021562	A	19880129	JP 1986-166138	19860715
JP 06073470	B	19940921		
CA 1320460	C	19930720	CA 1987-542064	19870714
US 5051355	A	19910924	US 1989-445160	19891206
PRIORITY APPLN. INFO.:			JP 1986-166138 A	19860715
			US 1987-70071 B1	19870706

AB The title monoclonal antibody is prepared by the hybridoma method. It is reactive with digestive system cancer but nonreactive with normal stomach tissue and recognizes sialylated glycoproteins or glycolipids. The monoclonal antibody is useful in diagnosing human digestive system cancer, particularly pancreatic cancer. Newborn C57BL/6 mice were pretreated i.v. with normal human stomach tissue membrane prepns. before immunization with human gastric cancer membrane prepns. Immunized spleen cells were fused with myeloma P3-U1, and the hybrid cells were cloned and selected for production of the desired antibody. Antibody AMC-462 recognizes a different antigen from that recognized by antibodies to carcinoembryonic antigen or NS19-9.

L10 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1988:490863 CAPLUS
DOCUMENT NUMBER: 109:90863
TITLE: Selection of a monoclonal antibody reactive with a high-molecular-weight glycoprotein circulating in the body fluid of gastrointestinal cancer patients
AUTHOR(S): Sakurai, Yoichi; Hirohashi, Setsuo; Shimosato, Yukio; Kodaira, Susumu; Abe, Osahiko
CORPORATE SOURCE: Res. Inst., Natl. Cancer Cent., Tokyo, 104, Japan
SOURCE: Cancer Research (1988), 48(14), 4053-8
CODEN: CNREA8; ISSN: 0008-5472
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The monoclonal antibody NCC-CO-450 (IgM κ) was selected by screening of reactivity with high-mol.-weight antigens (Mr > 106) isolated from ascitic fluid of a colon cancer patient. This antibody detected heterogeneous but predominantly high-mol.-weight antigens in 4 of 6 ascitic fluid samples from gastrointestinal cancer patients by immunoblotting anal. A sandwich RIA was developed in order to examine the serum level of this antigen. While 97% of sera had a neg. antigen value in normal donors, 56% of patients with colorectal carcinoma and 40% of patients with gastric carcinoma showed a pos. antigen value. The distribution of the antigen in sera of patients with various cancers did not show any correlation with the distribution of carcinoembryonic antigen or CA 19-9. From immunohistochem. and biochem. analyses, NCC-CO-450 antigen was characterized as a mucin-like glycoprotein abundant in normal colonic epithelium as well as in carcinomas of the colon, stomach, and pancreas. The immunohistochem. reactivity of NCC-CO-450 was distinct from that of other monoclonal antibodies reported to be useful for serol. diagnosis. The epitope recognized by NCC-CO-450 is considered to be an O-linked carbohydrate chain without terminal sialic acid but is different from the known carbohydrate chains, i.e., Lea, Lex, LeY, Tn, sialyl-Lea, and sialyl sugar chain defined by NCC-ST-439 in a competitive binding inhibition assay of monoclonal antibodies. This newly defined antigen is a good example of a normal antigen shed from cancer cells that can be used successfully as a serum tumor marker.

L10 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1987:154401 CAPLUS
DOCUMENT NUMBER: 106:154401
TITLE: Distribution of lung adenocarcinoma-associated antigens in human tissues and sera defined by monoclonal antibodies KM-52 and KM-93
AUTHOR(S): Shitara, Kenya; Hanai, Nobuo; Yoshida, Hajime
CORPORATE SOURCE: Tokyo Res. Lab., Kyowa Hakko Kogyo Co., Ltd., Machida, 194, Japan
SOURCE: Cancer Research (1987), 47(5), 1267-72
CODEN: CNREA8; ISSN: 0008-5472
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Two monoclonal antibodies to human lung adenocarcinoma, KM-52 and KM-93, were generated by the novel immunizing procedure using mice rendered tolerant to the normal human lung (Hanai, N., et al., 1986). KM-93 recognized sialylated carbohydrate epitope on the antigen different from CA19-9 and DU-PAN-2, while KM-52 recognized the protein antigen. Both antigens were different from carcinoembryonic antigen, α-fetoprotein, and β2-microglobulin. Here, the distribution of KA-52 and KA-93, the antigens recognized by KM-52 and KM-93, resp., in various tissues and sera was investigated. In immunoperoxidase staining, KM-93 reacted strongly and frequently with tumor cells of lung adenocarcinoma and partially with those of lung squamous cell carcinoma, large cell carcinoma, and small cell carcinoma. In normal adult and fetal tissues, KA-93 was expressed on the surface of a small number of cells of the lung, pancreas, liver, kidney, and bone marrow. KM-52 reacted selectively with tumor cells of adenocarcinoma among 4 different histol. types of lung carcinoma. In normal adult and fetal tissues, KA-52 was distributed on a small number of cells of the lung, stomach, intestine, and pancreas. Of the 2 monoclonal antibodies, KM-93 could be used in detecting the antigen in sera of patients with lung cancer. The KA-93 level in sera was determined by the sandwich-type ELISA. Serum with a high KA-93 level was found in 34 of 70 patients with lung adenocarcinoma (48.6%), one of 67 healthy adults (1.5%), and none of 32 patients with benign diseases. Combined detection of KA-93 with KA-32, a new tumor marker of lung squamous cell carcinoma elevated the pos. percentage in patients with lung squamous cell carcinoma (52.7%) and with lung

adenocarcinoma (59.5%). Apparently, KM-52 and KM-93 are potential monoclonal antibodies in immunohistol. and serum diagnosis of lung adenocarcinoma, resp.

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CA SUBSCRIBER PRICE	-11.70	-11.70

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